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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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VINCENT A. CICHOSZ
DELPHI TECHNOLOGIES, INC.
Legal Staff Mail Code: 480-414-420
P.O. Box 5052
Troy, MI 48007-5555

EXAMINER

TRAN, HIEN THI

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 01/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/903,983

Applicant(s)

MYERS ET AL.

Examiner

Hien Tran

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 October 2004.
2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
4a) Of the above claim(s) 16-20 is/are withdrawn from consideration.
5) ☐ Claim(s) _____ is/are allowed.
6) ☒ Claim(s) 1-15 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☒ Claim(s) 1-20 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☒ The drawing(s) filed on 12 July 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 7/12/01 & 1/16/04.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election with traverse of Group I, claims 1-15 in the reply filed on 10/18/04 is acknowledged. The traversal is on the ground(s) that the claims have common features and should be examined together. This is not found persuasive because the apparatus as claimed in claim 1 can be made by another and materially different process, such as the one not requiring an endcone.

The requirement is still deemed proper and is therefore made FINAL.

2. Claims 16-20 are withdrawn from further consideration pursuant to 37 CFR 1.142(b), as being drawn to a nonelected invention, there being no allowable generic or linking claim. Applicant timely traversed the restriction (election) requirement in the reply filed on 10/18/04..

Drawings

3. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the "catalytic converter unit" (claims 1 and 9), gasket (claim 7) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must

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be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

4. The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they do not include the following reference sign(s) mentioned in the description: "26" (page 5, line 30). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.84(c)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

5. The drawings have not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the drawings to comply with CFR 1.84(p)(5), e.g. they should include the reference sign(s) mentioned in the specification and vice versa.

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Specification

6. The specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Objections

7. Claims 3-6, 11 are objected to because of the following informalities:

In claim 3, line 3 --unit-- should be inserted after "converter".

In claim 4, line 3 --element-- should be inserted after "bushing" (note claim 1, line 4) .

See claims 5-6 likewise.

In claim 11, line 2 "an" should be changed to --the--.

Appropriate correction is required.

Claim Rejections - 35 USC § 102

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. Claims 1-3, 5-6, 8-15 are rejected under 35 U.S.C. 102(b) as being anticipated by Matsushima (5,615,551).

With respect to claims 1-3, 9-11, Matsushima discloses an exhaust system for an internal combustion engine comprising:

a catalytic converter unit 10;

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a bushing element 34 provided in a shell wall of end cone of said catalytic converter unit;
and

an oxygen sensor 36 positioned within exhaust flow of the catalytic converter unit and extending through said bushing element 34 and having a connector disposed in intimate contact with said bushing element (Figs. 2-5), wherein said oxygen sensor is positioned within said catalytic converter unit at an angle less than 90 degrees to the centerline of the exhaust flow within said catalytic converter unit (Fig. 3, col. 3, lines 1-12).

With respect to claims 5-6, 12-13 and 15, Matsushima discloses that the bushing element has threads 44 disposed through the shell wall such that said connector threads into said bushing element to dispose at least a portion of said oxygen sensor within said exhaust flow (col. 4, lines 15-24, Figs. 3-4); and a substantially flat surface 50 which intimately contacts at least a portion 52 of said connector to form a gas tight seal between said oxygen sensor and said exhaust flow (col. 2, lines 62-67; Figs. 3-4).

Claim 14 is directed to method limitation and therefore is of no patentable moment in apparatus claim. Sine claim 14 does not further define any structure of the system, the apparatus of Matsushima meets the instant claim.

Instant claims 1-3, 5-6, 8-15 structurally read on the apparatus of Matsushima.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima (5,615,551) in view of Celerier et al (WO 98-45584 corresponding to US 2001/0025419) in view of Kruger (6,555,070).

The apparatus of Matsushima is substantially the same as that of the instant claim, but fails to disclose provision of a double wall.

However, Kruger discloses provision of a catalytic converter unit includes an insulated wall construction having an inner wall spaced from an outer wall.

It would have been obvious to one having ordinary skill in the art to provide an insulated wall construction as taught by Kruger in the apparatus of Matsushima so as to enhance the insulation benefits thereof.

13. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Matsushima (5,615,551) in view of Celerier et al (WO 98-45584 corresponding to US 2001/0025419) in view of Nishio et al (4,883,643).

The apparatus of Matsushima is substantially the same as that of the instant claim, but fails to disclose provision of a gasket.

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However, Nishio et al discloses provision of a gasket 16 for preventing leakage of the exhaust gas from between the sensor and the wall.

It would have been obvious to one having ordinary skill in the art to provide a gasket as taught by Nishio et al in the apparatus of Matsushima for preventing leakage of the exhaust gas from between the sensor and the wall.

Conclusion

14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hien Tran whose telephone number is (571) 272-1454. The examiner can normally be reached on Tuesday-Friday from 7:30AM-6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Caldarola can be reached on (571) 272-1444. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

HT

Hien Tran
Hien Tran
Primary Examiner
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